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(54) **Suitcase.**

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(73) Proprietor : **HOMAR N.V.**
Plaza Jojo Corea 1/5
Willemstad Curaçao (AN)

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(72) Inventor : **Verheij, Johannes Willem**
Fazantstraat 47
NL-2162 GK Lisse (NL)
Inventor : **Van Peer, Irene Petra**
Azoren 3
NL-3524 ET Utrecht (NL)

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(74) Representative : **Hoijtink, Reinoud et al**
OCTROOIBUREAU ARNOLD & SIEDSMA
Sweelinckplein 1
NL-2517 GK Den Haag (NL)

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FR-A- 2 206 064
US-A- 2 510 754
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US-A- 4 254 850

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Description

The invention relates to a suitcase. The transportation and handling of suitcases forms a continual problem for different reasons. If a large suitcase is chosen then one encounters the drawback that it becomes heavy and awkward to handle. An attempt has been made to solve this problem by providing larger suitcases with carrying wheels. However, small-size carrying wheels are chosen in order not to make the use of the suitcase awkward for the user. Because of this the suitcase rolls with difficulty when it is pulled along. Use is further made of portable folding framework-type frames onto which the suitcase is laid in order to enable it to be pulled along. The carrying of such a frame is awkward however. Moreover, certain requirements are made of suitcases in respect of the dimensions, particularly when these are used as so-called hand luggage in air traffic. If a suitcase is to be taken into the airplane then it must be stowable in the luggage space above the seating areas or under the seat or it has to be possible to place it against the edge of the seat covered by the legs of the seated passenger. Smaller suitcases do of course comply with this requirement but these have the drawback of limited carrying volume.

The invention has for its object to provide a suitcase which, in view of the dimensions thereof, can be used as so-called hand luggage, has a reasonable, preferably divisible capacity, on the one side for instance for clothing, and on the other side for documents, and which can moreover be transported without all too great a physical effort.

This is achieved using a suitcase comprising a frame, consisting of double walls arranged parallel to and at a distance from each other and connected by a bottom part, a carrying wheel in each of the double walls pivotable between a rest position in the double wall and an active position outside that space and an actuating system for causing the carrying wheels to pivot.

With such a suitcase there is the possibility of causing the carrying wheels to pivot outwards for transportation and of making the suitcase roll forwards, and, for the non-transporting position, of causing the wheels to pivot into the space between the double walls so that the suitcase can be handled like any other suitcase.

The actuating system is coupled to a bracket slideable in lengthwise direction of the walls, such that when the bracket is extended the carrying wheels are in the position outside the space in the double walls and when the bracket is retracted the carrying wheels are inside this space.

The bracket, which is for example U-shaped and whereby each leg of the U is inserted into a double wall, is used as both actuator means coupled to the actuating system for the carrying wheels and in ex-

tended position as pulling bracket for transporting the suitcase. In order to achieve a sufficient length for the pulling bracket the legs preferably consist of telescopically extendable parts. For enabling the bracket to withstand compressing loads encountered during use, the bracket is preferably provided with means for fixing it in its fully extended position.

As well as performing a pivoting movement while swivelling into the active position the rotating shafts of the carrying wheels also perform a translation movement.

Owing to the coupling of the extension movement of the pulling bracket and the pivoting of the carrying wheels to or from the active position both the pivoting movement of the carrying wheels and the extension movement of the legs of the U-shaped bracket are synchronized. This is important since if extension of the legs of the U is non-synchronized there is the danger that they will go out of square and jam.

A second suitcase can be detachably arranged against the bottom wall of the suitcase. The suitcase can thereby be a clothing suitcase for example, while the second suitcase can be a so-called attache case. The first suitcase can have a moveable bottom wall connected to the bottom part over a bellows construction. In the absence of the second attache case the bottom wall of the first suitcase can be brought outwards so that the loading space is enlarged. The suitcase preferably has a rounded upper wall such that when the suitcase is disposed on the floor against the seat for example of an airplane seat the user is not thereby obstructed since the suitcase matches the shape of the seat.

Other features and advantages of the invention will become apparent from the description of embodiments as according to the annexed drawings. In the drawings:

- fig. 1 shows in perspective view and in dismantled state the suitcase frame with a second suitcase arranged therein,
- fig. 2 shows the suitcase according to the invention with extended bracket and carrying wheels moved outwards,
- fig. 3 shows in perspective view the suitcase in the transporting position,
- fig. 4 shows in perspective view an embodiment of the actuating system for the carrying wheels,
- fig. 5 shows a partial sectional perspective view of the suitcase in the transporting position,
- fig. 6 shows a sectional perspective view along the line VI in fig. 5,
- fig. 7 shows a perspective view along the line VII in fig. 1.

A suitcase (45) comprises a frame 1 consisting substantially of two double walls 2 and 3 arranged parallel to and at a distance from each other, a bottom part 50 dividing the walls, and an actuating system for the carrying wheels 6, 7 such that when a bracket 10

is extended (fig. 2 and 3) the carrying wheels are in the active position and when it is in the retracted position (fig. 1) the wheels are in the rest position. In the suitcase there is releasably arranged a second comparatively smaller case, a so-called attache case, 47. The attache case 47 is removable (fig. 1) and can be used as a case independently. Bottom wall 46 of the suitcase (45) is preferably movable using a bellows construction 48 so that it can be moved in order to be able to enlarge the packing space when the second case 47 is absent. The whole can be carried using a carrying grip 52, which is movable in a slot 53. Depending on the presence of the second case 47 the carrying grip 52 can be placed in the slot 53 in the most favourable position relative to the centre of gravity.

In the rest position the carrying wheels 6, 7 are held in a space 4, 5 in the respective double walls 2, 3. In the rest position the access space for the wheels is closed off by respective flaps 54 and 55. The flap is biased to the closed position. The suitcase (45) displays on one side a rounded form 49 such that when the suitcase is placed against a seat in an airplane the user sitting on the seat is not obstructed.

Arms 56, 57 are retractable into and extendable out of the bottom part 50, which arms can serve in the extended position (fig. 3) to accomodate a third suitcase or bag lying separately on the suitcase.

Legs 11, 12 of the U-shaped bracket 10 consist of three telescopically extendable parts 28, 29, 30.

The actuating system 8 comprises the bracket (10) and a pivot arm 19 which is connected to the relevant carrying wheel. The pivot arm (19) is pivotable around a pivot shaft 18 which is slidable in a guiding slot 15. Present in the pivot arm 19 is a channel-shaped guiding track 17 in which can move a roller 20 connected to the bracket 10. When the bracket is pulled out the roller 20 moves in the channel-shaped guiding track 17 and forces the pivot arm (19) into pivoting to the outside and into a translation as the slot (15) moves with respect to the shaft (18) whereby the movement initially is a mainly pivoting movement and in the latter portion of the path a translation movement. In the operative position of the carrying wheel, that is, the position outside the space between the double walls, the pivot arm (19) is fixed in form fitting manner by co-action of a nose 21 and a recess 22 in the pivot arm. A similar fixation occurs in the rest position using a nose 23 and the recess 24. The wheels are arrested in their active position using a stop member 25 which is under the influence of a leaf spring 26 and which can pivot around a pivot shaft 58. During the movement to the active position the stop member 25 falls with nose 59 behind an angle-shaped recess 27. When the bracket 10 is pushed inward the stop member 25 is pushed aside so that disengagement takes place.

As can be seen for example from fig. 4, in the rest

position body 44 of the U-shaped bracket is recessed into a groove 60. The bracket 10 is fixed in this position by two commercially available latches 13a, 13b; 14a, 14b Springs 62, 63 between the second telescopic part 29 of each leg 11, 12 of said bracket 10 and the bottom part 50 of said suitcase ensure that said bracket 10 pops up upon release of said latches 13a, 13b, 14a, 14b. Spring 63 is connected to stud 64.

For fixing the U-shaped bracket 10 in its fully extended position, fixation means 9 is provided. Figures 5 and 6 show one embodiment of the fixation means 9. In this embodiment the bottom part 50 of the suitcase (45) is provided with a doubler element 31 in line with each leg 11, 12 of the bracket 10, each said doubler element 31 being provided with a threaded opening 32 accommodating an adjustment screw 33. To the adjustment screw 33 is attached one end of the thinnest member 34 slidable into a telescopically slidable guide (36) of a commercially available telescopic antenna (43,51), mounted inside the U-shaped bracket 10. To the other end of said thinnest member 34 a flexible element 37 is attached, which runs along the inside of said telescopic antenna 43,51 in a snug fit, and which continues in a snug fit along the inside of telescopically slidable guides (38, 39) that are connected to guide 36 and that run the length of the body 44 of said U-shaped bracket 10. The length of the flexible element 37 is such, that when the bracket 10 is retracted, said flexible element 37 passes through a blocking element 40, but that when said bracket 10 is fully extended, said flexible element 37 stops just short of said blocking element 40. The blocking element 40 comprises a body 65, provided with at least one hole 66 running the length of said body 65, said body 65 being movably mounted in the body 44 of the U-shaped bracket 10 in such a way, that when said body 65 is in a first position, extending partly through an opening 67 in the lower skin of said body 44 of said bracket 10, said body 65 acts to block the passage between the telescopically slidable guides 38, 39, thereby prohibiting movement of said flexible element 37, whereas when said body 65 is in a second position, completely sunk into the body 44 of bracket 10, a hole 66 in said body 65 acts as a passageway between the telescopically slidable guides 38, 39, thus allowing movement of said flexible element 37 through said slidable guides 38, 39. The body 65 of blocking element 40 is spring mounted and biased to a passage blocking position.

The suitcase 45 is provided with an extra security measure in the form of a chain or cable 68 closable around for example a post or pillar or the like. In the rest position the cable 68 is wound around a biased spool 69 (fig. 7). By operating a combination lock 70 a panel 71 can be moved outwards, the cable 68 can be pulled from the spool and the loose end placed in a locking opening 72. Subsequently the panel 71 is closed again.

Claims

1. Suitcase comprising a frame (1), consisting of double walls (2, 3) arranged parallel to and at a distance from each other and connected by a bottom part (50) forming a wall of said suitcase (45), a carrying wheel (6, 7) in each of said double walls (2, 3) that is pivotable between a rest position in spaces (4, 5) defined by each of said double walls and an active position outside that space (4, 5) and an actuating system (8) for causing said carrying wheels (6, 7) to pivot, characterized in that the actuating system (8) consists of a bracket (10) and a pivot arm (19) which is connected to said carrying wheel (6, 7), and displays a channel-shaped guiding track (17) and is pivotable around a pivot shaft (18) which is slidable in a guiding slot (15) in said pivot arm (19), said guiding track (17) co-operating with a roller (20) which is connected to said bracket (10). 20
2. Suitcase (45) as claimed in claim 1, characterized in that the actuating system (8) is coupled to said bracket (10) which is slidable relative to the frame (1) such that when said bracket (10) is extended the carrying wheels (6, 7) are in the position outside the space (4, 5) in the double walls (2, 3) and when said bracket (10) is retracted said carrying wheels (6, 7) are in the position inside said space (4, 5). 25
3. Suitcase (45) as claimed in claims 1 or 2, characterized in that the bracket (10) is U-shaped consisting of a body (44) and legs (11, 12) and each leg (11, 12) of the U is inserted into the respective double wall (2, 3). 30
4. Suitcase (45) as claimed in claim 3, characterized in that the legs (11, 12) consist of telescopically extendable parts (28, 29, 30). 35
5. Suitcase (45) as claimed in any of claims 1 to 4, characterized in that during pivoting to the active position the carrying wheels (6, 7) also performs a translation movement. 40
6. Suitcase (45) as claimed in claim 1, characterized by a nose (21) co-acting with a recess (22) for blocking the pivot arm (19) in its operative position and a nose (23) and a co-acting recess (24) for blocking said pivot arm (19) in its rest position. 45
7. Suitcase (45) as claimed in claim 6, characterized by a spring (26) biased pivotable stop member (25) and co-acting therewith an angle-shaped recess (27) on the pivot arm (19) for arresting the pivoting of the carrying wheels (6, 7) in the active position. 50
8. Suitcase (45) as claimed in any of claims 2 to 7, characterized by means (9) for fixing the bracket (10) in its fully extended position. 55
9. Suitcase (45) as claimed in claim 8, characterized in that said means (9) comprises: telescopically slidabile guides (36, 38, 39) mounted in said bracket (10), forming a guiding track; an element (37) made of flexible material, slidably accommodated in a snug fit in said guiding track, and attached with one end to the beginning of said guiding track near the bottom part (50) of said suitcase; a blocking element (40) movable between a first position in which the passage through said guiding track is blocked and a second position in which the passage through said guiding track is cleared; the length of the element (37) being such, that said element (37) reaches within said blocking element (40) when the bracket (10) is fully extended, and passes through said blocking element (40) when said bracket (10) is retracted. 60
10. Suitcase (45) as claimed in claim 9, characterized in that said blocking element (40) is mounted in said bracket (10) by means of a biasing spring, said biasing spring being relaxed when said blocking element (40) is in the first position, blocking the passage through said guiding track, and said biasing spring being loaded when said blocking element (40) is in the second position, clearing the passage through said guiding track. 65
11. Suitcase (45) as claimed in claim 10, characterized in that the beginning of each said guiding track is fixed to an adjustment screw (33) mounted in the bottom part (50) of said suitcase, allowing adjustment of the length of each said flexible element (37, 41). 70
12. Suitcase (45) as claimed in any of claims 2 to 11, characterized in that when the bracket (10) is retracted, the body (44) of said bracket (10) is recessed into a groove (60) in an upper part of said frame (1) and fixed in that position by latches (13a, 13b, 14a, 14b). 75
13. Suitcase (45) as claimed in claim 12, characterized in that between the lower end of the second telescopic part (29) of each leg (11, 12) of the bracket (10) and the bottom part (50) of said suitcase a biasing spring (62, 63) is provided, said biasing spring (62, 63) being loaded when said bracket (10) is fully retracted, and relaxed when said bracket (10) is extended so far that the body (44) of said bracket (10) is clear from the groove (60). 80

14. Suitcase (45) as claimed in claim 1, characterized in that a second suitcase (47) is releasably arranged against a bottom wall (46) of the suitcase (45). 5

15. Suitcase (45) as claimed in claim 14, characterized in that the first suitcase (45) has bottom wall (46) connected to the bottom part (50) over a bellows construction (48). 10

16. Suitcase (45) as claimed in claims 1 or 15, characterized in that the suitcase (45) has a side (49) with a rounded form. 15

17. Suitcase (45) as claimed in any of claims 1 to 16, characterized in that said suitcase (45) is provided with a carrying grip (52) movable in a slot (53). 20

18. Suitcase as claimed in any of claims 1 to 17, characterized by carrying arms (56, 57) that are extendable in a direction perpendicular to the rounded form side (49) of the first suitcase (45). 25

Patentansprüche

1. Koffer mit einem Rahmen 1, bestehend aus Doppelwänden (2, 3), die parallel und mit Abstand zueinander angeordnet und durch einen Bodenteil (50), der eine Wand des Koffers (45) bildet, verbunden sind, einem Tragrad (6, 7) in jeder der Doppelwände (2, 3), das zwischen einer Ruhestellung in von der jeweiligen Doppelwand begrenzten Zwischenräumen (4, 5) und einer Arbeitsstellung außerhalb des Zwischenraumes (4, 5) schwenkbar ist und einem Betätigungs system (8) zum Schwenken der Tragräder (6, 7), dadurch gekennzeichnet, daß das Betätigungs system (8) aus einem Bügel (10) und einem Schwenkarm (19) besteht, der mit dem Tragrad (6, 7) verbunden ist und eine U-schienenförmige Führungsbahn (17) aufweist und um eine Schwenkachse (18) schwenkbar ist, die in einem Führungsschlitz (15) in dem Schwenkarm (19) verschiebbar ist, und daß die Führungsbahn (17) mit einer mit dem Bügel (10) verbundenen Rolle (20) zusammenwirkt. 30

2. Koffer (45) nach Anspruch 1, dadurch gekennzeichnet, daß das Betätigungs system (8) mit dem Bügel (10) gekoppelt ist, der relativ zum Rahmen (1) verschiebbar ist, so daß die Tragräder (6, 7) wenn der Bügel (10) ausgezogen wird, in der Stellung außerhalb des Zwischenraums (4, 5) in den Doppelwänden (2, 3) sind und die Tragräder (6, 7) wenn der Bügel (10) eingefahren wird, in der Stellung innerhalb des Zwischenraumes (4, 5) sind. 35

3. Koffer (45) nach Anspruch 1 oder 2, dadurch gekennzeichnet, daß der Bügel (10) U-förmige mit einem Körper (44) und Schenkeln (11, 12) ist und jeder Schenkel (11, 12) des U's in die jeweilige Doppelwand (2, 3) eingefügt wird. 40

4. Koffer (45) nach Anspruch 3, dadurch gekennzeichnet, daß die Schenkel (11, 12) aus teleskopisch ausziehbaren Teilen (28, 29, 30) bestehen. 45

5. Koffer (45) nach jedem der Ansprüche 1 bis 4, dadurch gekennzeichnet, daß während des Schwenkens in die Arbeitsstellung die Tragräder (6, 7) auch eine Translationsbewegung durchführen.

6. Koffer (45) nach Anspruch 1, gekennzeichnet durch eine Nase (21), die mit einer Aussparung (22) zusammenwirkt, um den Schwenkarm (19) in seiner Betriebsstellung zu sperren, und eine Nase (23) und eine zusammenwirkende Aussparung (24), um den Schwenkarm (19) in seiner Ruhestellung zu sperren. 50

7. Koffer (45) nach Anspruch 6, gekennzeichnet durch ein Feder (26) vorgespanntes, schwenkbares Anschlagelement (25) und eine damit zusammenwirkende, winkelförmige Aussparung (27) auf dem Schwenkarm (19) zum Arretieren des Schwenkens der Tragräder (6, 7) in die Arbeitsstellung. 55

8. Koffer (45) nach jedem der Ansprüche 2 bis 7, gekennzeichnet durch Mittel (9) zum Fixieren des Bügels (10) in seiner vollständig ausgezogenen Stellung.

9. Koffer (45) nach Anspruch 8, dadurch gekennzeichnet, daß die Mittel (9) umfassen: teleskopisch verschiebbare Führungen (36, 38, 39) die in dem Bügel montiert sind und eine Führungsspur bilden; ein Element (37), das aus flexilem Material hergestellt ist und verschiebbar in einer Schlichtpassung in die Führungsspur aufgenommen ist und mit einem Ende am Beginn der Führungsspur in der Nähe des Bodenteils (50) des Koffers befestigt ist; ein Blockier- oder Riegelelement (40), das zwischen einer ersten Stellung, in welcher der Durchgang durch die Führungsspur versperrt wird, und einer zweiten Stellung, in welcher der Durchgang durch die Führungsspur freigegeben wird, bewegbar ist; wobei die Lage des Elements (35) derart ausgebildet ist, daß das Element (37) in das Riegelelement (40) hineinreicht, wenn der

Bügel vollständig ausgezogen ist und durch das Riegelelement (40) hindurchläuft, wenn der Bügel (10) eingefahren ist.

10. Koffer (45) nach Anspruch 9,
dadurch gekennzeichnet, daß das Riegelelement (40) in dem Bügel mittels einer Spannfeder befestigt ist, wobei die Spannfeder entlastet ist, wenn das Riegelelement (40) sich in der ersten Stellung befindet und den Durchgang durch die Führungsspur versperrt, und die Spannfeder belastet ist, wenn das Riegelelement (40) sich in der zweiten Stellung befindet und den Durchgang durch die Führungsspur freigibt.

11. Koffer (45) nach Anspruch 10,
dadurch gekennzeichnet, daß der Anfang jeder Führungsspur an einer Einstellschraube (33) befestigt ist, die im Bodenteil (50) des Koffers montiert ist und ein Einstellen der Länge des flexiblen Elements (37, 41) erlaubt.

12. Koffer (45) nach jedem der Ansprüche 2 bis 11,
dadurch gekennzeichnet, daß wenn der Bügel (10) eingefahren wird, der Körper (44) des Bügels in eine Nut (60) im oberen Teil des Rahmens versenkt wird und in dieser Stellung durch Verriegelungen (13a, 13b, 14a, 14b) fixiert wird.

13. Koffer (45) nach Anspruch 12,
dadurch gekennzeichnet, daß zwischen dem unteren Ende des zweiten teleskopischen Teils (29) jedes Schenkels (11, 12) des Bügels (10) und dem oberen Teil (50) des Koffers eine Spannfeder (62, 63) vorgesehen ist, wobei die Spannfeder (62, 63) belastet wird, wenn der Bügel (10) vollständig eingefahren wird, und entlastet wird, wenn der Bügel (10) soweit ausgezogen wird, daß der Körper (44) des Bügels (10) die Nut (60) freigibt.

14. Koffern (45) nach Anspruch 1,
dadurch gekennzeichnet, daß ein zweiter Koffer (47) lösbar gegen eine Bodenwand (46) des Koffers (45) angeordnet ist.

15. Koffer (45) nach Anspruch 14,
dadurch gekennzeichnet, daß der erste Koffer (45) eine Bodenwand (46) aufweist, die mit dem Bodenteil (50) über eine Faltenbalgkonstruktion (48) verbunden ist.

16. Koffer (45) nach Anspruch 1 oder 15,
dadurch gekennzeichnet, daß der Koffer (45) eine Seite (49) mit einer runden Form aufweist.

17. Koffer (45) nach jedem der Ansprüche 1 bis 16,
dadurch gekennzeichnet, daß der Koffer (45)

5 mit einem Tragegriff (52) versehen ist, der in eine Vertiefung (53) bewegbar ist.

18. Koffer (45) nach jedem der Ansprüche 1 bis 17,
gekennzeichnet durch Tragarme (56, 57) die in eine Richtung senkrecht zur Rundform - Seite (49) des ersten Koffers (45) ausziehbar sind.

Revendications

1. Valise comprenant un châssis (1), constitué de doubles parois (2, 3) placées parallèlement l'une à l'autre et à distance l'une de l'autre et raccordées par une partie de fond (50) formant une paroi de la valise (45), une roue de transport (6, 7) placée dans chaque double paroi (2, 3) et qui peut pivoter entre une position de repos, dans un des espaces (4, 5) délimités dans les doubles parois, et une position de travail à l'extérieur de cet espace (4, 5), et un système de manœuvre (8) destiné à provoquer le pivotement des roues de transport (6, 7), caractérisée en ce que le système de manœuvre (8) comporte une anse (10) et un bras pivotant (19) qui est raccordé à la roue de transport (6, 7), et comportant un chemin de guidage (17) en forme de canal et pouvant pivoter autour d'un arbre (18) de pivotement qui peut coulisser dans une fente de guidage (15) formée dans le bras pivotant (19), le chemin de guidage (17) coopérant avec un galet (20) qui est raccordé à l'anse (10).
2. Valise (45) selon la revendication 1, caractérisée en ce que le système de manœuvre (8) est couplé à l'anse (10) qui peut coulisser par rapport au châssis (1) afin que, lorsque l'anse (10) est en position sortie, les roues de transport (6, 7) soient en position à l'extérieur de l'espace (4, 5) délimité dans les doubles parois (2, 3) et, lorsque l'anse (10) est rentrée, les roues de transport (6, 7) soient en position à l'intérieur dudit espace (4, 5).
3. Valise (45) selon la revendication 1 ou 2, caractérisée en ce que l'anse (10) a une forme en U comprenant un corps (44) et des branches (11, 12), et chaque branche (11, 12) du U est introduite dans la double paroi respective (2, 3).
4. Valise (45) selon la revendication 3, caractérisée en ce que les branches (11, 12) sont formées par les parties télescopiques (28, 29, 30).
5. Valise (45) selon l'une quelconque des revendications 1 à 4, caractérisée en ce que, pendant le pivotement vers la position de travail, les roues de transport (6, 7) effectuent aussi un mouvement de translation.

6. Valise (45) selon la revendication 1, caractérisée par un nez (21) qui coopère avec une cavité (22) de blocage du bras pivotant (19) en position de travail, et par un nez (23) et une cavité complémentaire (24) destinés à bloquer le bras pivotant (19) dans sa position de repos.

7. Valise (45) selon la revendication 6, caractérisée par un organe d'arrêt (25) qui peut pivoter et qui est rappelé par un ressort (26) et, en coopération avec lui, une cavité (27) en forme d'angle formée sur le bras pivotant (19) et destinée à arrêter le pivotement des roues de transport (6, 7) dans la position de travail.

8. Valise (45) selon l'une quelconque des revendications 2 à 7, caractérisée par un dispositif (9) destiné à immobiliser l'anse (10) en position totalement sortie.

9. Valise (45) selon la revendication 8, caractérisée en ce que le dispositif (9) d'immobilisation comprend :

- des guides télescopiques (36, 38, 39) montés dans l'anse (10), formant un chemin de guidage ;
- un élément (37) d'un matériau souple, disposé afin qu'il coulisse en étant ajusté intimement dans le chemin de guidage, et fixé par une première extrémité au début de la voie de guidage à proximité de la partie de fond (50) de la valise ; et
- un élément de blocage (40) mobile entre une première position dans laquelle le passage du chemin de guidage est bloqué et une seconde position dans laquelle le passage du chemin de guidage est libéré ;
- la longueur de l'élément souple (37) étant telle que l'élément (37) atteint l'intérieur de l'élément de blocage (40) lorsque l'anse (10) est totalement sortie, et passe dans l'élément de blocage (40) lorsque l'anse (10) est rentrée.

10. Valise (45) selon la revendication 9, caractérisée en ce que l'élément de blocage (40) est monté dans l'anse (10) au moyen d'un ressort de rappel, ce ressort étant relâché lorsque l'élément de blocage (40) est dans la première position, en bloquant le passage dans le chemin de guidage, et le ressort de rappel étant chargé lorsque l'élément de blocage (40) est dans la seconde position et libère le passage dans le chemin de guidage.

11. Valise (45) selon la revendication 10, caractérisée en ce que le début de chaque chemin de guidage est fixé à une vis de réglage (33) montée dans la partie de fond (50) de la valise et permet l'ajustement de la longueur de chaque élément souple (37, 41).

12. Valise (45) selon l'une quelconque des revendications 2 à 11, caractérisée en ce que, lorsque l'anse (10) est rentrée, le corps (44) de l'anse (10) est en retrait dans une gorge (60) formée à la partie supérieure du châssis (1) et est immobilisé dans cette position par des verrous (13a, 13b, 14a, 14b).

13. Valise (45) selon la revendication 12, caractérisée en ce que, entre l'extrémité inférieure de la seconde partie télescopique (29) de chaque branche (11, 12) de l'anse (10) et la partie de fond (50) de la valise, un ressort de rappel (62, 63) est disposé afin qu'il soit soumis à une force lorsque l'anse (10) est totalement rentrée et qu'il soit relâché lorsque l'anse (10) est sortie de manière que le corps (44) de l'anse (10) soit en-dehors de la gorge (60).

14. Valise (45) selon la revendication 1, caractérisée en ce qu'une seconde valise (47) est disposée de façon amovible contre la paroi de fond (46) de la première valise (45).

15. Valise (45) selon la revendication 14, caractérisée en ce que la première valise (45) a une paroi de fond (46) qui est raccordée à la paroi de fond (50) sur une construction à soufflet (48).

16. Valise (45) selon la revendication 1 ou 15, caractérisée en ce que la valise (45) a un côté (49) de forme arrondie.

17. Valise (45) selon l'une quelconque des revendications 1 à 6, caractérisée en ce que la valise (45) a une poignée de transport (52) mobile dans une fente (53).

18. Valise selon l'une quelconque des revendications 1 à 17, caractérisée par des bras de transport (56, 57) qui peuvent s'allonger en direction perpendiculaire au côté de forme arrondie (49) de la première valise (45).

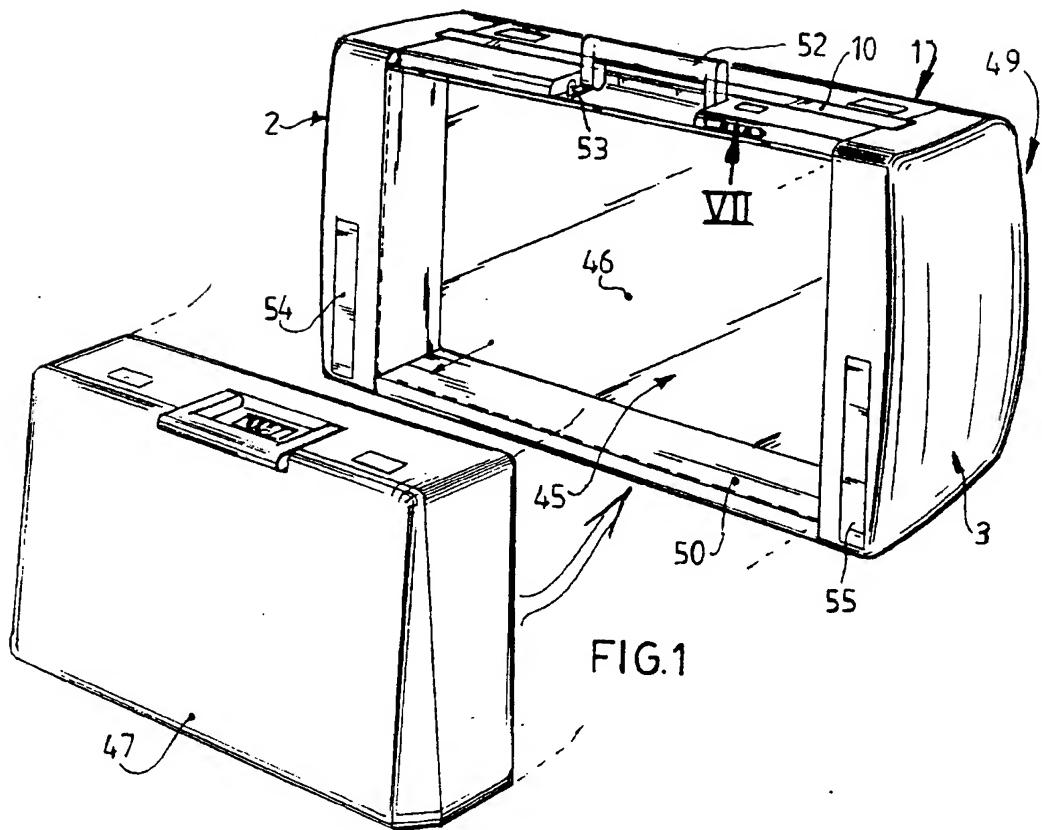


FIG.1

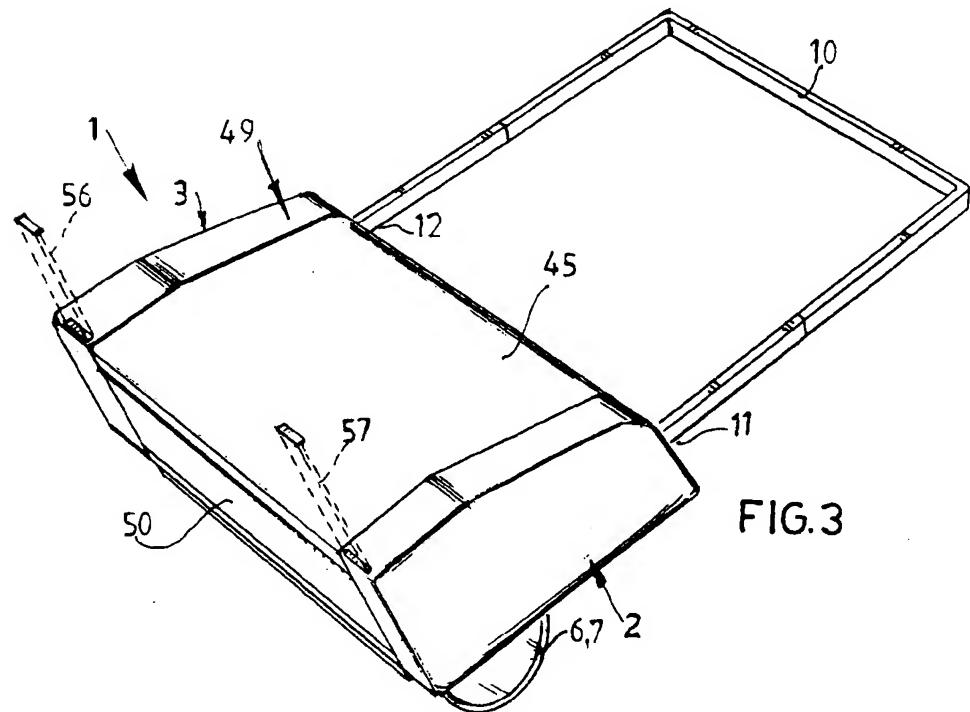
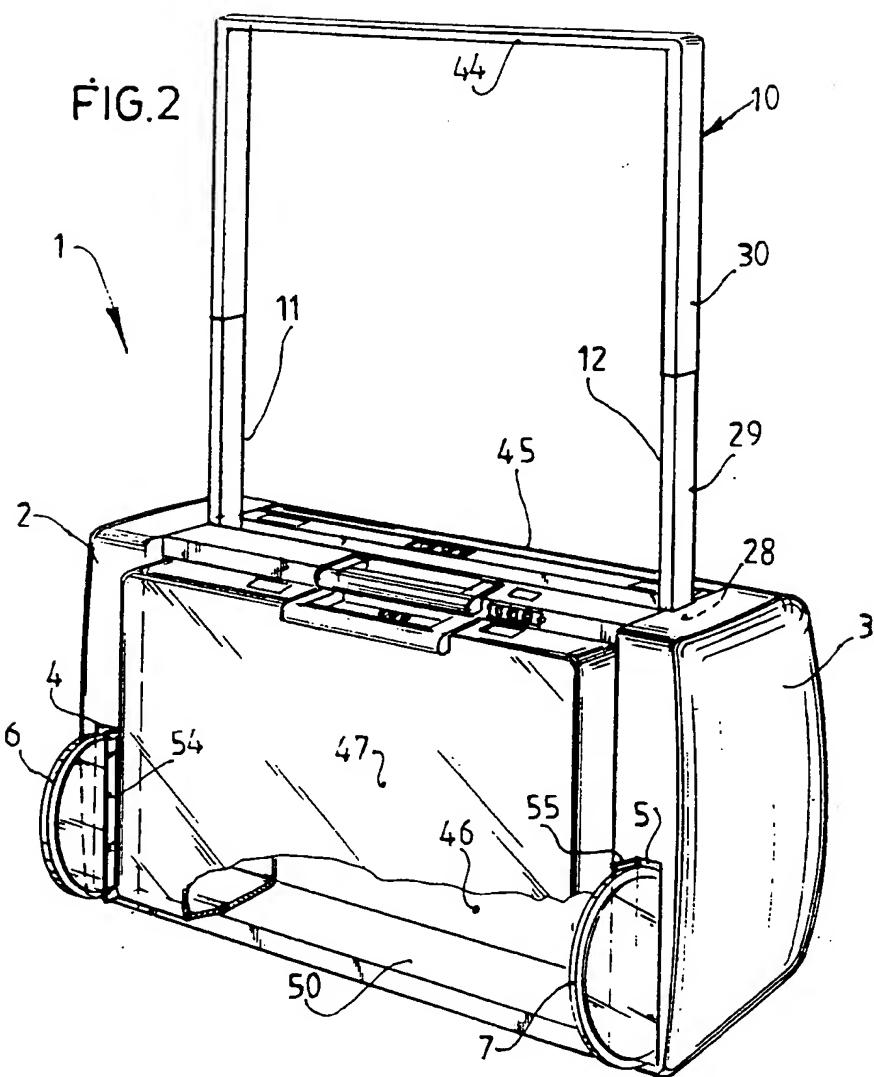


FIG.3



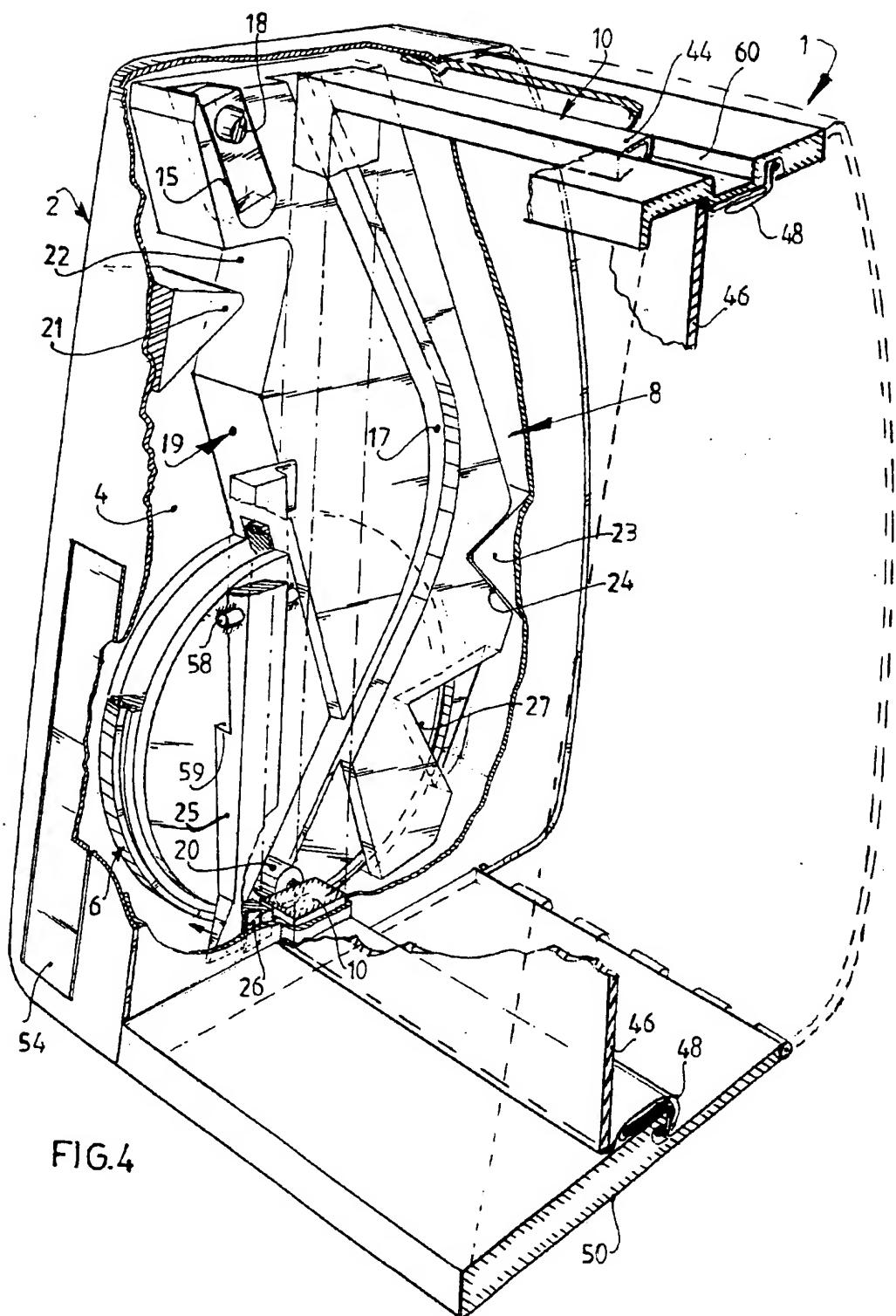


FIG.4

